

**DEPARTMENT OF LABOR AND ECONOMIC GROWTH**

**DIRECTOR'S OFFICE**

**CONSTRUCTION SAFETY STANDARDS**

Filed with the Secretary of State on November 20, 2006

These rules take effect immediately upon filing with the Secretary of State unless adopted under sections 33, 44, or 45a(6) of 1969 PA 306. Rules adopted under these sections become effective 7 days after filing with the Secretary of State.

(By authority conferred on the director of the department of labor and economic growth by sections 19 and 21 of 1974 PA 154 and Executive Reorganization Order No. 1996-2 and 2003-1, MCL 408.1019, 408.1021, 445.2001, and 445.2011)

R 408.42223, R 408.42225, R 408.42235, and R 408.42238 of the Michigan Administrative Code are amended, and R 408.42209 is added to the Code as follows:

**PART 22. SIGNALS, SIGNS, TAGS, AND BARRICADES**

**R 408.42209 Availability of documents.**

**Rule 2209. (1) The following Michigan occupational safety and health standards are referenced in these rules. Up to 5 copies of these standards may be obtained at no charge from the Michigan Department of Labor and Economic Growth, MIOSHA Standards Section, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909-8143 or via the internet at website: [www.michigan.gov/mioshastandards](http://www.michigan.gov/mioshastandards). For quantities greater than 5, the cost, as of the time of adoption of these rules, is 4 cents per page.**

- (a) Construction Safety Standard Part 6 Personal Protective Equipment, R 408.40601 et seq.**
- (b) Construction Safety Standard Part 10 Lifting and Digging Equipment, R 408.41001a et seq.**
- (c) Construction Safety Standard Part 13 Mobile Equipment, R 408.41301 et seq.**
- (d) Construction Safety Standard Part 27 Blasting and Use of Explosives, R 408.42701 et seq.**
- (e) Construction Safety Standard Part 30 Telecommunications, R 408.43001 et seq.**
- (f) Construction Safety Standard Part 45 Fall Protection, R 408.44501 et seq.**

**(2) Part 6: Temporary Traffic Control of the Manual on Uniform Traffic Control Devices for Streets and Highways, 2005 Michigan MUTCD/2003 Federal Edition, hereafter referred to as the 2005 MMUTCD, is adopted by reference in these rules and is available at no cost from the Michigan Department of Transportation via the internet at website: [www.michigan.gov/mdot](http://www.michigan.gov/mdot). The entire 2005 MMUTCD may be purchased from Michigan Technical University, Local Technical Assistance Program, Room 309 Dillman Building, 1400 Townsend Drive, Houghton, Michigan, 49931; (906) 487-2102; at a cost of \$135 at the time of publication of these rules.**

**R 408.42223 Traffic control.**

**Rule 2223. (1) Traffic control devices shall be installed and maintained as prescribed in Part 6 as revised January 2001, of the 1994-~~2005~~ **MMUTCD**, edition of the Michigan Manual of Uniform Traffic Control Devices, (MMUTCD) which is adopted in these rules by reference in **R 408.42209**. Part 6 is available for review at the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909, or is available at no cost from any of the Michigan Department of Transportation (MDOT) Regional Offices, MDOT Service Centers, or MDOT central offices in Lansing, Michigan.**

(2) An employer shall ensure that all operations have routine inspections of traffic control elements for acceptable levels of operation. When traffic exposures are such that signs, signals, or barricades do not provide the necessary protection on, or adjacent to, a highway or street, traffic regulators or other appropriate traffic controls shall be provided. Modification of traffic controls, such as additional signs or devices, or a change in work operations, shall be determined by a qualified person who is responsible for the project traffic control.

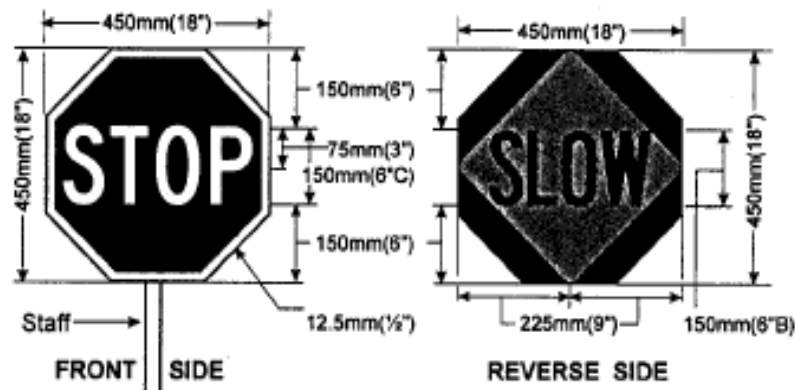
(3) Signaling directions by traffic regulators shall conform to the provisions of Part 6 ~~as revised January 2001, of the 1994-2005 edition of the Michigan Manual of Uniform Traffic Control Devices, MMUTCD~~ which is adopted in these rules by reference in **R 408.42209**.

(4) A hand-held paddle sign shall have 2 faces and it shall be attached to a staff of suitable design that will allow the entire unit to be held and controlled by 1 traffic regulator. The bottom of the sign shall be a minimum of 6 feet (1.8 meters) above the roadway surface. The sign shall be fastened to the staff so that no part of the legend is obscured. The portion of the staff within the sign face shall match the sign colors. The sign shall not be less than 18 by 18 inches (450 millimeters x 450 millimeters) and the letters shall have a minimum height of 6 inches (150 millimeters). All letters and spacing between letters shall be as prescribed in Part 6 ~~as revised January 2001, of the 1994-2005 MMUTCD, edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD)~~ which is adopted in these rules by reference in **R 408.42209**. The legend shall be optically centered horizontally on the sign. One side of the sign shall display a 'STOP' face and the other side shall display the message 'SLOW', except that if it is necessary for 1 traffic regulator to stop 2 directions of traffic at the same time, then a 'STOP' face shall be used on each side of the sign. The 'STOP' face shall have a red background with white letters and border. The 'SLOW' face shall have an orange background with black letters and border. The shape of the sign shall be octagonal and the portions of the sign other than the diamond-shaped 'SLOW' face shall be black. When the sign paddle is used during hours of darkness, the red and white of the 'STOP' face and the orange of the 'SLOW' face shall be reflectorized. Sheet metal or other light semi-rigid material may be used for mounting the 'STOP' and 'SLOW' faces.

(5) If signaling by a traffic regulator is necessary on construction operations that are not within a public right-of-way, then a hand-held paddle sign as specified in subrule (4) of this rule shall be used.

(6) The paddle sign shall be as follows:

#### DETAIL OF PADDLE SIGN



\*NOTE: The dimensions shown for the sign are minimum.

Proportionately larger paddle signs may be used.

(7) In periods of darkness, appropriate lighting shall be used to illuminate the traffic regulator and the traffic regulator station. The lighting shall be as is required in Part 6 of the **2005 MMUTCD, Michigan Manual of Uniform Traffic Control Devices (MMUTCD)** which is adopted by reference in **R 408.42209** this rule. Appropriate lighting means lighting that illuminates the traffic regulator so that he or she is visible to oncoming traffic and does not impair either the traffic regulator's or motorists' visibility due to blinding or shadowing.

(8) An employer shall provide, and a traffic regulator shall wear, a vest, a shirt, or a jacket that is fluorescent orange, yellow, strong yellow green, or a combination of these colors and shall contain retro reflective material that is orange, yellow, white, silver, or strong yellow green. A traffic regulator's

vest, shirt, or jacket shall be clearly visible at 360 degrees through the full range of body motion day and night.

(9) An employer shall require that the garment is inspected before each use for all of the following:

- (a) Wear.
- (b) Damage.
- (c) Fading.
- (d) Reflectivity.
- (e) Other deterioration.

Defective garments shall be reported to the employer and the employer shall either repair or replace the garment.

(10) A traffic regulator shall also wear head, eye, and foot protection as prescribed in Construction Safety Standard Part 6 Personal Protective Equipment, R 408.40601 et seq. ~~of the Michigan Administrative Code. A copy of these rules are available at no cost from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909, web site: [WWW.CIS.STATE.MI.US/BSR/DIVISIONS/STD](http://WWW.CIS.STATE.MI.US/BSR/DIVISIONS/STD).~~

(11) If vehicular traffic violates traffic laws and creates a hazard to employees performing construction operations, then an employer shall notify the appropriate law enforcement agencies of the unit of government exercising authority over the roadway for the enforcement of applicable speed limits and other traffic laws.

R 408.42225 Placement, removal, relocation, and use of traffic control devices from a moving vehicle; handholds.

Rule 2225. Construction and maintenance operations from a moving vehicle.

(1) Construction and maintenance operations that require placement, relocation, or removal of pavement markings, or traffic control devices such as drums, barricades, cones, or signs, shall provide protection to an employee by any of the following methods:

(a) Use of a seat and a seatbelt.

(b) A standard guardrail system as prescribed in Construction Safety Standard Part 45 Fall Protection, R 408.44501 which adopts C.F.R. §1926.502 et seq. by reference. ~~A copy of these rules are available at no cost from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909, web site: [WWW.CIS.STATE.MI.US/BSR/DIVISIONS/STD](http://WWW.CIS.STATE.MI.US/BSR/DIVISIONS/STD).~~

(c) A guardrail as described in subdivision (b) of this subrule may be modified as follows for the following operations as specified in paragraphs (i) and (ii) of this subdivision. These rules apply only to the placement, removal, relocation, and use of traffic control devices from a moving vehicle, and do not apply to the transportation of an employee or employees outside of the construction influence area (CIA) or from point to point within the CIA. Transportation of an employee or employees outside of the ~~construction influence area (CIA)~~ or from point to point within the CIA shall be as required in C.F.R. §1926.601(b)(8) and (b)(9), which is adopted by reference in Construction Safety Standard Part 13 Mobile Equipment, R 408.41301 et seq. ~~of the Michigan Administrative Code. A copy of these rules are available at no cost from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909, web site: [WWW.CIS.STATE.MI.US/BSR/DIVISIONS/STD](http://WWW.CIS.STATE.MI.US/BSR/DIVISIONS/STD).~~

(i) For continuous moving operations, the top rail of a guardrail may be removed at the point of operation when a handhold is provided and is used and only during continuous moving operations for the placement, removal, or relocation of traffic control devices, such as cones, tubular devices, or pavement markings.

(ii) For intermittent stopping operations, a section of guardrail may be removed at the point of operation when a handhold is provided and is used when intermittent stopping of the vehicle is required for the placement, removal, or relocation of traffic control devices, such as drums, signs, or pavement markings. The handhold shall be used by employees at all times when the vehicle is in motion and it shall be located so that the employee is positioned a minimum of 48 inches (1.2 meters) in distance from the area from the railing that has been removed.

(d) Use of other means that will provide equivalent fall protection for an employee may be used. Such a system shall be performance oriented and shall be designed so that it does not create a

greater hazard to the employee.

(2) A handhold shall be oriented and a size to promote gripping by wrapping fingers around not less than 270 degrees (3 sides) of the device or place designated. The handhold shall be capable of withstanding not less than 200 pounds of force in any direction and be free from rough edges, slippery surfaces, or hazardous projections. The handhold shall be in place and identified as such before employees are permitted to perform their assigned tasks while riding on moving vehicles.

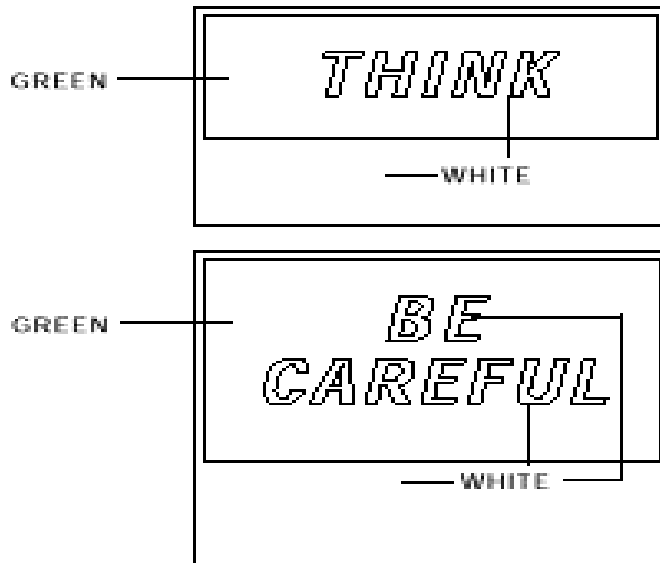
R 408.42235 Safety instruction sign.

Rule 2235. (1) A safety instruction sign shall be used for a general instruction or suggestion relative to safety measures.

(2) The proportions for a safety instruction sign shall be not less than those prescribed in table 5 and the format of figure 3 shall be followed.

(3) A safety instruction sign shall have the signal word in white on a green background in the upper panel. The lower panel where additional wording may be used shall be black letters on a white background.

FIGURE 3  
SAFETY INSTRUCTION SIGNS



(Note: the words "Think" and "Be Careful" given here are only illustrations. Other wording may be used.)

TABLE 5  
STANDARD PROPORTIONS FOR SAFETY INSTRUCTION SIGNS

Sign Size		Green Rectangular Panel		Word "THINK" Height of Letter		Minimum Space Available for Sign Wording Below Panel			
Inches	Millimeters	Inches	Millimeters	Inches	Millimeters	Inches	Millimeters		
7 x 10	175 x 250	2 3/4 x 9 3/8	69 x 234	1 3/8	34	3 1/2 x 9 3/8	88 x 234		
10 x 14	250 x 350	3 1/4 x 13 3/8	81 x 334	2 1/4	56	5 1/2 x 13 3/8	138 x 334		
14 x 20	350 x 500	3 3/4 x 19 3/8	94 x 484	2 3/4	69	9 x 19 3/8	225 x 484		
20 x 28	500 x 700	4 1/4 x 27 3/8	106 x 684	3 1/4	81	14 1/2 x 27 3/8	363 x 684		
Sign Size		Green Panel		Word "BE" Height of Letters		Word "CAREFUL" Height of Letters		Minimum Space Available for Sign Wording Below Panel	
Inches	Milli- meters	Inches	Milli- meters	Inches	Milli- meters	Inches	Milli- meters	Inches	Milli- meters
7 x 10	175 x 250	3 3/8 x 9 3/8	84 x 234	1 3/4	42	1 3/16	<del>28</del> 30	2 1/2 x 9 3/8	63 x 234
10 x 14	250 x 350	4 3/4 x 13 3/8	119 x 334	1 3/4	42	2 3/16	55	4 x 13 3/8	100 x 334
14 x	350 x 500	6 3/4 x 19 3/8	169 x 484	2 1/2	63	3 1/8	78	6 x 19 3/8	150 x 484

20									
20 x 28	500 x 700	9 1/2 x 27 3/8	238 x 684	3 1/2	88	4 3/8	109	9 1/4 x 27 3/8	231 x 684

R 408.42238 Signs for blasting and use of explosives.

Rule 2238. Where blasting and the use of explosives takes place, signs shall be as prescribed in Construction Safety Standard Part 27 Blasting and Use of Explosives, R 408.42701 et seq. ~~of the Michigan Administrative Code. A copy of these rules are available at no cost from the Michigan Department of Consumer and Industry Services, Standards Division, 7150 Harris Drive, P.O. Box 30643, Lansing, Michigan, 48909, web site: [WWW.CIS.STATE.MI.US/BSR/DIVISIONS/STD](http://WWW.CIS.STATE.MI.US/BSR/DIVISIONS/STD).~~